

**AMENDMENTS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**In the claims**

1. (Currently amended) A crosspoint switch architecture having:  
a monolithic substrate;  
a plurality (N) of electrical inputs provided on said substrate;  
a plurality (M) of electrical outputs provided on said substrate;  
switch means disposed on said substrate for selectively interconnecting said inputs to said outputs, said switch means having M multiplexers; and  
means disposed on said substrate for controlling said switch means.

2. (canceled)

3. (Original) The invention of Claim ~~2~~<sup>1</sup> wherein each multiplexer is an N to 1 multiplexer and each multiplexer is adapted to receive each of said N electrical inputs.

4. (Original) The invention of Claim 3 wherein each of said N inputs to each of said multiplexers is received through a respective one of N switchable amplifiers.

5. (Currently amended) The invention of Claim 4 1 wherein each multiplexer includes N selection multiplexers.

6. (Original) The invention of Claim 5 further including means for summing the outputs of said N selection multiplexers to provide a single output.

7. (Original) The invention of Claim 6 further including means for buffering said single output.

8. (Original) The invention of Claim 3 wherein each of said N inputs to each of said multiplexers is received through a respective one of N switchable isolation buffers.

9. (Original) The invention of Claim 8 further including means for summing the outputs of said N buffers to provide a single output.

10. (Original) The invention of Claim 9 further including means for buffering said single output.

11. (Original) The invention of Claim 1 wherein said control means includes a serial in, parallel out shift register.

12. (Original) A crosspoint switch architecture having:

a monolithic substrate;

a plurality (N) of electrical inputs provided on said substrate;

a plurality (M) of electrical outputs provided on said substrate;

M multiplexers disposed on said substrate for selectively interconnecting said inputs to said outputs, each of said multiplexers being an N to 1 multiplexer, whereby each multiplexer is adapted to receive each of said electrical inputs; and

a serial in, parallel out shift register disposed on said substrate for controlling said multiplexers.

13. (Original) The invention of Claim 12 wherein each of said N inputs to each of said multiplexers is received through a respective one of N switchable amplifiers.

14. (Original) The invention of Claim 13 wherein each of said N inputs to each of said multiplexers is received through a respective one of N switchable isolation buffers.

15. (Original) The invention of Claim 14 further including means for summing the outputs of said N buffers to provide a single output.

16. (Original) The invention of Claim 15 further including means for buffering said single output.

17. (Original) A method for switching including the steps of:

providing a monolithic substrate;

providing a plurality (N) of electrical inputs provided on said substrate;

providing a plurality (M) of electrical outputs provided on said substrate;

providing M, N to 1, multiplexers on said substrate, each multiplexer being adapted to receive each of said electrical inputs, and selectively interconnecting said inputs to said outputs; and

providing a serial in, parallel out shift register on said substrate for controlling said multiplexers.

18. (New) A crosspoint analog switch architecture for switching continuous time analog waveform signals, said switch architecture comprising:

a monolithic substrate;

a plurality (N) of electrical inputs provided on said substrate;

a plurality (M) of electrical outputs provided on said substrate;

a switch disposed on said substrate for selectively interconnecting said inputs to said outputs;

and

a controller disposed on said substrate for controlling said switch means.